



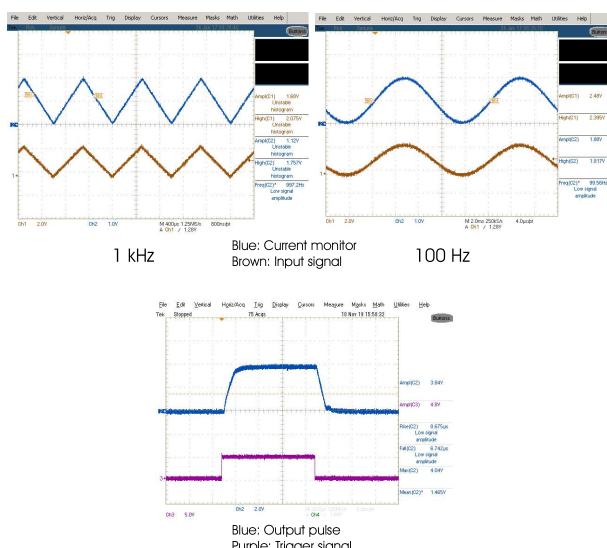
# PicoLAS

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## LDP-CWL 06-20 / LDP-CWL 12-20

Laser diode driver with high performance and low noise

Rev.2101



### Technical Data\*

Output current	0 .. 6 A <sup>1</sup> , 0 .. 12 A <sup>2</sup>
Max. compliance voltage	20 V <sup>1,2</sup>
Current noise	< 20 mA ; < 0.77 %
Current overshoot	< 1 %
Analog modulation	260 kHz @ 3 A <sup>1,2</sup> 140 kHz @ 12 A <sup>2</sup>
Current settling time (full-scale)	< 3 µs <sup>1</sup> , 4.8 µs <sup>2</sup>
Manual mode (for pulses)	
Current setting input scale	0 .. 4.8 V <sup>2</sup> ; 0...2.4 V <sup>1</sup> 0.4 V/A <sup>1,2</sup>
Current monitor output scale	3 A/V <sup>1,2</sup>
Trigger	Analog
Supply voltage	15 .. 48 V min. 10 V above compliance voltage
Power dissipation (cw)	Max. typ. 20.4 W Max. typ. 65 W Max. 108 W
CW mode	
Modulation mode	
Manual mode	
Dimensions in mm	60.9 x 57.8 x 30
Weight	158 g

\* Specifications measured with a fast recovery diode instead of a laser diode.  
Technical data is preliminary and subject to change without further notice.

<sup>1</sup> LDP-CWL 06-20 , <sup>2</sup> LDP-CWL 12-20

### Product Description

The LDP-CWL is a fast driver for typical laser diodes. With its high output voltage range it is suitable for IR, blue laser diodes and all kinds of LED's.

The combination of a switching and linear regulator yields a high performance, high efficiency with excellent low noise behavior. The LDP-CWL has an exceptional linearity characteristic with a low output ripple. Depending on the operating point the LDP-CWL generates a low drop-out independent of laser diode load.

- Innovative current regulation concept actively prevents laser diode from overcurrent
- Very low current ripple
- Over temperature shutdown
- Shunt MOSFET short the output clamps in case of an error
- Protection of the laser diode against reverse currents
- High efficient combination of a switch mode and a linear regulator

Optional Accessories: LDP-C BOB